

Operation MANUAL

High Pressure Gravity Feed Spray Gun - Heavy Duty

Prod. No. 409123 Mod. No. SG600

HVLP Gravity Feed Spray Gun - Heavy Duty

Prod. No. 409124 Mod. No. SG600HVLP



 WARNING - FOLLOW THESE RULES FOR SAFE OPERATION

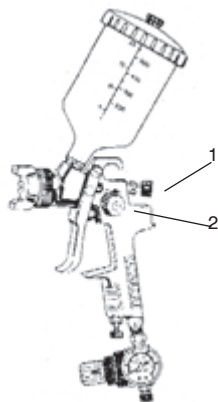
- During cleaning and flushing, solvents can be forcefully expelled from fluid and air passages. Some solvents can cause eye injury.
- Be sure all others in the area are wearing impact resistant eye and face protection.
- Even small projectiles can injure eyes and cause blindness.
- Air under pressure can cause severe injury. Always shut off air supply, drain hose of air pressure and disconnect tool from air supply when not in use, before changing accessories or when making repairs. Never direct air at yourself or anyone else. Whipping hoses can cause serious injury. Always check for damaged or loose hoses and fittings. Never use quick change couplers at tool. They add weight and could fail due to vibration. Instead, add a hose whip and quick connect coupling between air supply and hose whip, or between hose whip and leader hose. Do not exceed maximum pressure:
 - 409123: 90 PSI
 - 409124: 63 PSI
- Always use tool a safe distance from other people in the work area.
- Maintain tools with care. Keep tools clean and oiled for best and safest performance. Follow instructions for lubricating and changing accessories. Wiping or cleaning rags and other flammable waste materials must be placed in tightly closed metal container and disposed of later in the proper fashion.
- Do not wear loose or ill fitting clothing, remove watches and rings.
- Do not over reach. Keep proper footing and balance at all times. Slipping, tripping and falling can be a major cause of serious injury or death. Be aware of excess hose left on the walking or work surface.
- Do not force tool. It will do the job better and safer at the rate for which it was designed.
- Do not abuse hose or connectors. Never carry tool by the hose or yank it to disconnect from air supply. Keep hoses away from heat, oil and sharp edges. Check hoses for weak or worn condition before each use, making certain that all connections are secure.
- High sound levels can cause permanent hearing loss. Protect yourself from noise. Noise levels vary with work surface. Wear ear protectors.
- When possible, secure work piece with clamps or vise so both hands are free to operate tool.
- Repetitive work motions, awkward positions and exposure to vibration can be harmful to hands and arms.
- Avoid inhaling dust or handling debris from work processes which can be harmful to your health.
- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of this tool.
- This tool is not intended for use in explosive atmospheres and is not insulated for contact with electrical power source.
- Solvent and coating can be highly flammable or combustible especially when sprayed. Adequate exhaust must be provided to keep air free of accumulations of flammable vapours.
- Smoking must never be allowed in spray area.
- Fire extinguishing equipment must be present in the spray area.
- Never spray near sources of ignition such as pilot lights, welders, etc.
- Halogenated hydrocarbon solvents - for example; methylene chloride, are not chemically compatible with the aluminum that might be used in many system components. The chemical reaction caused by these solvents reacting with aluminum can become violent and lead to an equipment explosion. Guns with stainless steel fluid passages may be used for these solvents. However, aluminum is widely used in other spray application equipment - such as material pumps, cups and regulators, valves, etc. Check all other equipment items before use and make sure they can also be used safely with these solvents. Read the label or data sheet for the material you intend to spray. If in doubt as to whether or not a coating or cleaning material is compatible, contact your material supplier.
- Sprayed materials may be harmful if inhaled, or if there is contact with the skin. Adequate exhaust must be provided to keep the air free of accumulations of toxic materials. Use a mask or respirator whenever there is a chance of inhaling sprayed materials. The mask must be compatible with the material being sprayed and its concentration.

⚠ FOR BEST PERFORMANCE, BE SURE TO DO THE FOLLOWING BEFORE USING THIS TOOL

- Tighten packing nuts if needed.
- Tighten the material cup to the gun securely
- Be sure not to exceed maximum air pressure at the gun. Maximum air pressure for each model is as follows:
 - 409123: 90 PSI
 - 409124: 63 PSI
- We suggest a working air inlet pressure of:
 - 409123: 50 - 70 PSI
 - 409124: 43 - 60 PSI
- Minimum compressor required:
 - 409123: 2 HP
 - 409124: 2 HP
- Air consumption:
 - 409123: 8 CFM
 - 409124: 11 CFM
- Adjust fluid control screw and spray width adjustment screw to your desired pattern before using on work piece.
- Clean all parts after use.

ADJUSTMENTS

1. Fluid control screw - turn right to decrease flow, left to increase
2. Spray width adjustment screw - turn right for round, left for fan pattern

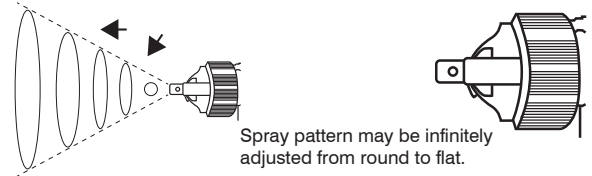


HVLP SPRAY GUNS

If you have chosen product number 409124, you have purchased a professional high volume, low pressure, spray gun. It is designed to spray very efficiently with virtually no overspray. To accomplish this, the inlet pressure regulation is critical. Please be sure to read pressure requirements carefully.

SPRAYING

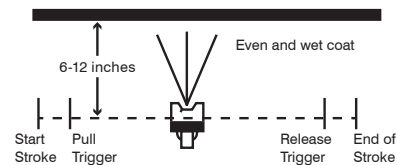
In normal use the nozzle wings are horizontal as shown here. This provides a vertical fan-shaped pattern which gives maximum, even, material coverage as the gun is moved back and forth parallel to the surface being finished.



Set atomization pressure at no more than the air pressure recommended: On 409124, a gauge is included on the tool to ensure correct setting. For optimum performance, some materials may spray better at PSI ratings below 63. If unsure, always test PSI ratings before using on work piece. Try spray, if it is too fine, decrease the air pressure or open the fluid control screw. If the spray is too thick, close the fluid control screw. Regulate the pattern width and repeat the adjustment of spray as needed.

OPERATION

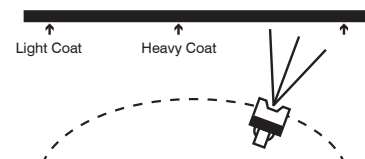
Proper handling of the gun is essential for obtaining a good finish. The gun should be held at a right angle to the surface being covered, and moved parallel with it. For precise control of the gun and material, the trigger should be released before the end of the stroke.



CORRECT

Hold the gun from 6" to 12" away from the surface, depending on material and atomizing pressure. For a uniform finish, lap each stroke over the preceding stroke, making sure the spray is smooth and wet.

Using the lowest possible atomizing air pressure will reduce over spray and provide maximum efficiency.



INCORRECT

OPERATION continued

Air flow should occur before fluid-flow when the gun is triggered. It may be necessary to adjust the fluid control screw to make sure air flows before fluid.

Do not alter the gun in any way.

To avoid cross threading, all spray gun parts should be screwed in hand tight initially. If the parts cannot be easily turned by hand, be sure you have the correct parts, unscrew, realign, and try again. Never use excessive force in matching parts.

CLEANING & MAINTENANCE

SPRAY GUN

1. Submerge the front end of the gun in solvent just until the fluid connection is covered.
2. Paint that has built up on the gun should be removed using a bristle brush and solvent.
3. Never submerge all of the spray gun in solvent because:
 - This will dissolve the lubricant in the leather packings and on the wear surfaces, causing them to dry out, resulting in difficult operation and faster wear.
 - Air passages in the gun will become clogged with dirty solvent.
4. Using a rag moistened with solvent, wipe down the outside of the gun.
5. Oil gun daily. Use a drop of lightweight machine oil on:
 - A. Fluid Needle
 - B. Air Valve Packing
 - C. Trigger Pivot Point

See *Figure 1* for location of above points
6. **Caution:** Do not use lubricants which contain silicone. Silicone may cause defects in the finish application.

CAUTION

DO NOT REMOVE BRASS BAFFLE ATTACHED TO THE FRONT BODY OF THE GUN. SPECIAL TECHNICAL TRAINING AND TOOLS ARE REQUIRED TO DO SO. ONLY AUTHORIZED SERVICE CENTRES SHOULD REMOVE THIS PART.

GRAVITY FEED

Turn off air supply. Remove lid from cup. Empty the cup of material. Clean the cup and lid. Add some cleaning solvent to the cup. Replace the cup lid. Turn on the air supply and spray with cleaning solvent. Repeat with clean solvent if necessary. Wipe gun and cup with rag moistened with cleaning solvent.

AIR NOZZLE, FLUID NOZZLE & AIR VALVE ASSEMBLY

1. All nozzles and needles are made to exact standards. They should be handled carefully.
2. To clean nozzles, immerse them in solvent until any dried material is dissolved, then blow them clean.
3. Do not use metal or sharp instruments to probe any of the holes in the nozzles.

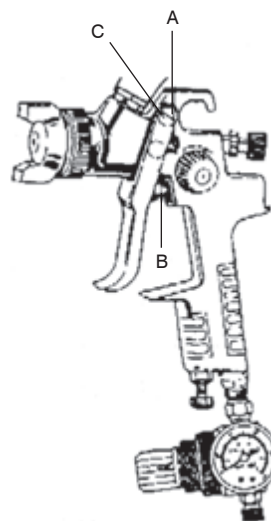

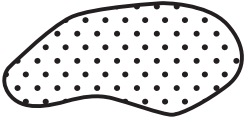

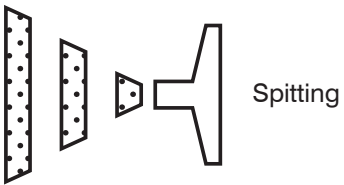


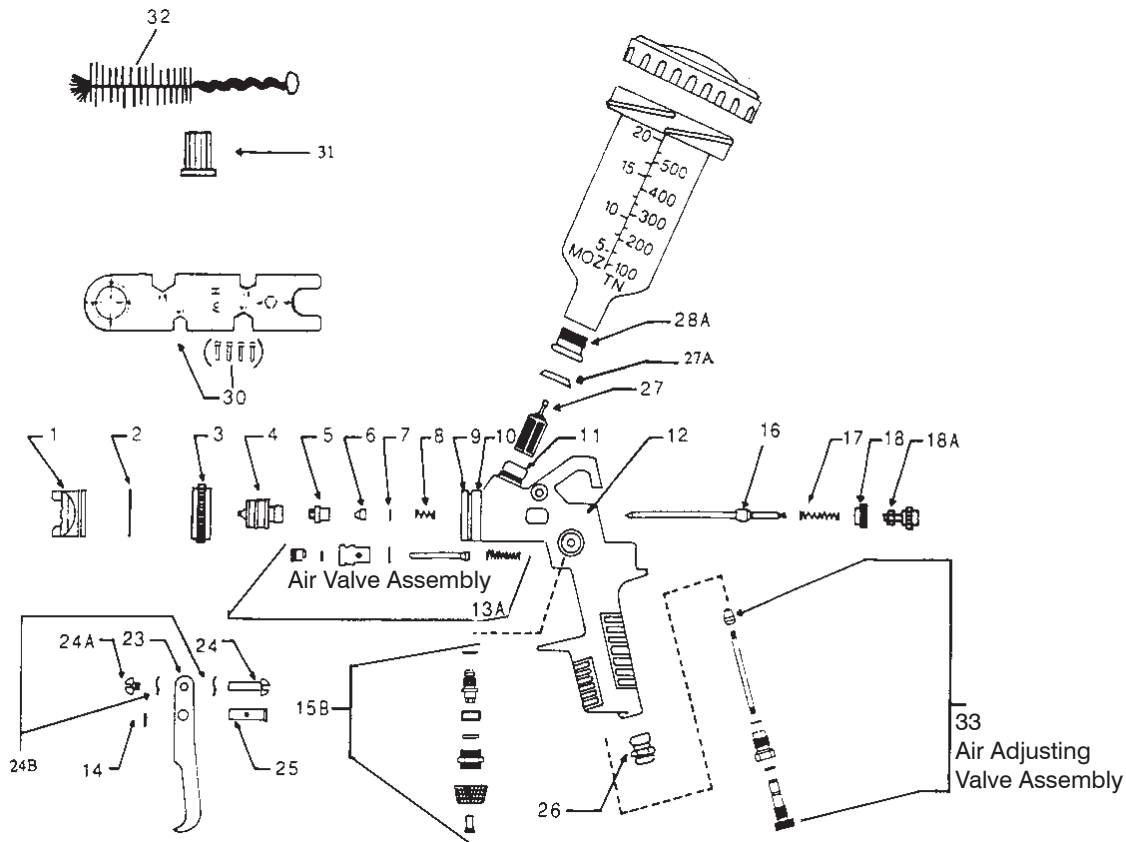
Figure 1

TROUBLESHOOTING

SPRAY PATTERN / CONDITION	PROBLEM	SOLUTION
	One side of nozzle is clogged.	Soak nozzle to loosen clog, then blow air through until clean. To clean orifices use a broom straw or tooth pick. Never try to detach dried material with a sharp tool.
	A) Loose air nozzle. B) Material around outside of air nozzle has dried.	A) Tighten air nozzle. B) Take off air nozzle and wipe off fluid tip, using a rag moistened with thinner.
	A) Atomized air pressure is set too high. B) Trying to spray a thin material in too wide a pattern.	A) Reduce air pressure. B) Increase material control by turning fluid control screw to left, while reducing spray width by turning width adjustment screw to right.
	A) Packing around needle valve is dried out. B) Fluid nozzle loosely installed, or dirt between nozzle and body. C) Loose or defective swivel nut on siphon cup.	A) Back up knurled nut, put a few drops of machine oil on packing, re-tighten nut. B) Take off fluid nozzle, clean rear of nozzle and seat in gun body or replace nozzle and bring in tight to gun body. C) Tighten or replace swivel nut.
Improper spray pattern.	A) Gun improperly adjusted. B) Dirty air cap. C) Fluid tip obstructed. D) Sluggish needle.	A) Readjust gun following instructions carefully. B) Clean air cap. C) Clean. D) Lubricate.
Unable to get round spray.	Fan adjustment screw not seating properly.	Clean or replace.
Will not spray.	A) No air pressure at gun. B) Fluid pressure too low with internal mix cap and pressure tank. C) Fluid control screw not open enough. D) Fluid too heavy for suction feed.	A) Check air supply and air lines. B) Increase fluid pressure at tank. C) Open fluid control screw. D) Thin material or change to pressure feed.
Fluid leakage from packing nut.	A) Packing nut loose. B) Packing worn or dry.	A) Tighten, but not so tight as to grip the needle. B) Replace packing or lubricate.
Dripping from fluid tip.	A) Dry packing. B) Sluggish needle. C) Tight packing nut. D) Worn fluid nozzle or needle	A) Lubricate. B) Lubricate. C) Adjust. D) For pressure feed, replace with new fluid nozzle and needle.
Thin, sandy coarse finish.	A) Gun held too far from surface. B) Atomization pressure set too high.	A) Move gun closer to surface. B) Adjust atomization pressure.
Thick, dimpled finish resembling orange peel.	Gun held too close to the surface.	Move gun further from surface.

High Pressure Gravity Feed Spray Gun - Heavy Duty

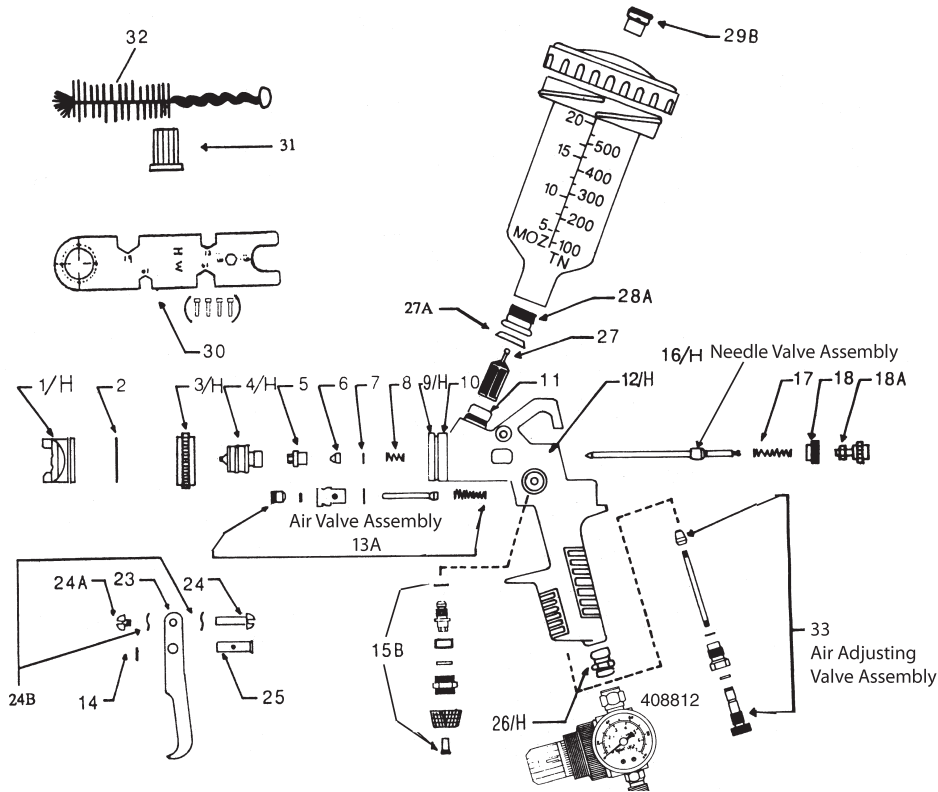
Prod. No. 409123 Mod. No. SG600



Ref. #	Part Number	Description	Ref. #	Part Number	Description
1	PUT-SG600-1	Air Nozzle	15B	PUT-SG600-15B	Control Knob Kit
2	PUT-SG600-2	Ring	17	PUT-SG600-17	Spring for Paint Needle
3	PUT-SG600-3	Aluminum Cap	18	PUT-SG600-18	Lock Nut for Fluid Control Knob
4	PUT-SG600-4	Fluid Nozzle	18A	PUT-SG600-18A	Fluid Control Knob
5	PUT-SG600-5	Package Screw for Paint Needle	23	PUT-SG600-23	Trigger
6	PUT-SG600-6	Teflon® Seal	24	PUT-SG600-24	Trigger Screw with 24B/24A
7	PUT-SG600-7	Washer	25	PUT-SG600-25	Pin
8	PUT-SG600-8	Spring	26	PUT-SG600-26	Air Connection Piece 1/4" BSP
9	PUT-SG600-9	Brass Ring	27	PUT-SG600-27	Material Sleeve
10	PUT-SG600-10	Gasket	27A	PUT-SG600-27A	Plastic Gasket
11	PUT-SG600-11	Connector for 600ml Cup	30	PUT-SG600-30	Spanner
12	PUT-SG600-12	Gun Body	31	PUT-SG600-31	Spanner Bag
13A	PUT-SG600-13A	Air Valve Assembly	32	PUT-SG600-32	Brush
	PUT-SG600-RK	Repair Kit for Spray Gun (#06, 07, 08, 13C, 13E, 13H, 14C, 14 x 4, 33F, 17)	33	PUT-SG600-33	Air Adjusting Valve Assembly

HVLP Gravity Feed Spray Gun - Heavy Duty

Prod. No. 409124 Mod. No. SG600HVLP



Ref. #	Part Number	Description	Ref. #	Part Number	Description
1H	PUTSG600HVLP1H	Air Nozzle / HVLP	18A	PUTSG600HVLP18A	Fluid Control Knob
2	PUTSG600HVLP2	Ring	23	PUTSG600HVLP23	Trigger
3H	PUTSG600HVLP3H	Aluminum Cap / HVLP	24	PUTSG600HVLP24	Trigger Screw with 24A
4H	PUTSG600HVLP4H	Fluid Nozzle / HVLP	24B	PUTSG600HVLP24B	Spring Washer
5	PUTSG600HVLP5	Package Screw for Paint Needle	25	PUTSG600HVLP25	Pin
6	PUTSG600HVLP6	Teflon® Seal	26H	PUTSG600HVLP26H	Air Connection Piece 1/4" BSP
7	PUTSG600HVLP7	Washer	27	PUTSG600HVLP27	Material Sleeve
8	PUTSG600HVLP8	Spring	27A	PUTSG600HVLP27A	Plastic Gasket
9H	PUTSG600HVLP9H	Brass Ring / HVLP	28A	PUTSG600HVLP28A	Adaptor
10	PUTSG600HVLP10	Gasket	29B	PUTSG600HVLP29B	Non-Drip Control Device
11	PUTSG600HVLP11	Connector for 600ml Cup	30	PUTSG600HVLP30	Spanner
12H	PUTSG600HVLP12H	Gun Body / HVLP	30A	PUTSG600HVLP30A	Spanner Pin
13A	PUTSG600HVLP13A	Air Valve Assembly	31	PUTSG600HVLP31	Spanner Bag
15B	PUTSG600HVLP15	Control Knob Kit	32	PUTSG600HVLP32	Brush
16H	PUTSG600HVLP16H	Paint Needle	33	PUTSG600HVLP33	Air Adjustment Valve
17	PUTSG600HVLP17	Spring for Paint Needle	18	PUTSG600HVLP18	Lock Nut for Fluid Control Knob
RK	PUTSG600HVLP RK	Repair Kit for Spray Gun (#06, 07, 08, 13C, 13E, 13H, 14C, 14 x 4, 33F 17)			